SERVER MONITORING USING VIRTUAL POINTS OF PRESENCE

A server monitoring system monitors the performance of a web site or other Internet server system, as seen by users in multiple geographic access locations, without the need for special monitoring software or hardware within such locations. Automated agents that run at a central data center generate message traffic that is used to access and monitor the server system from the multiple remote locations. The message traffic associated with a particular remote access location is transmitted from the data center to the remote location across a dedicated link, such as an ATM link, and is routed onto the Internet at a corresponding Internet access point. The server response to each request message flows back to the data center across the same link as the corresponding request message. The remote access points thus serve as virtual points of presence for monitoring purposes. Server response times as seen from the remote access locations are determined by measuring the total response times as observed from the data center, and deducting from the total response times the round-trip latencies associated with the corresponding dedicated links. The response times and other performance data generated by the agents are aggregated within a database that is local to the agents. Multiple data centers may be interconnected such that each data center services a particular continent or other region using a respective set of virtual points of presence.